

# Gulf Coastal Plains & Ozarks LCC

## Strategic Habitat Conservation & Surrogate Species:

### Where Does the GCPO LCC Fit In?

Lafayette, LA October 24, 2012

Greg Wathen – Coordinator

Greg.wathen@tn.gov



# Objectives of this Presentation

- Quick introduction on the genesis of the network of Landscape Conservation Cooperatives and Climate Science Centers.
- Description of the GCPO LCC's Mission, Functional Roles, and Structure.
- Share some perspectives on where we hope to go as a Cooperative, and how this might relate to the SHC/Surrogate Species conversation.

# The Genesis of LCCs



Sam Hamilton, Director

USFWS

September 1, 2009 –

February 20, 2010

“...Interior bureaus and agencies must work together, and with other federal, state, tribal and local governments, and private landowner partners, to develop landscape-level strategies for understanding and responding to climate change impacts.”



## Secretarial Order 3289

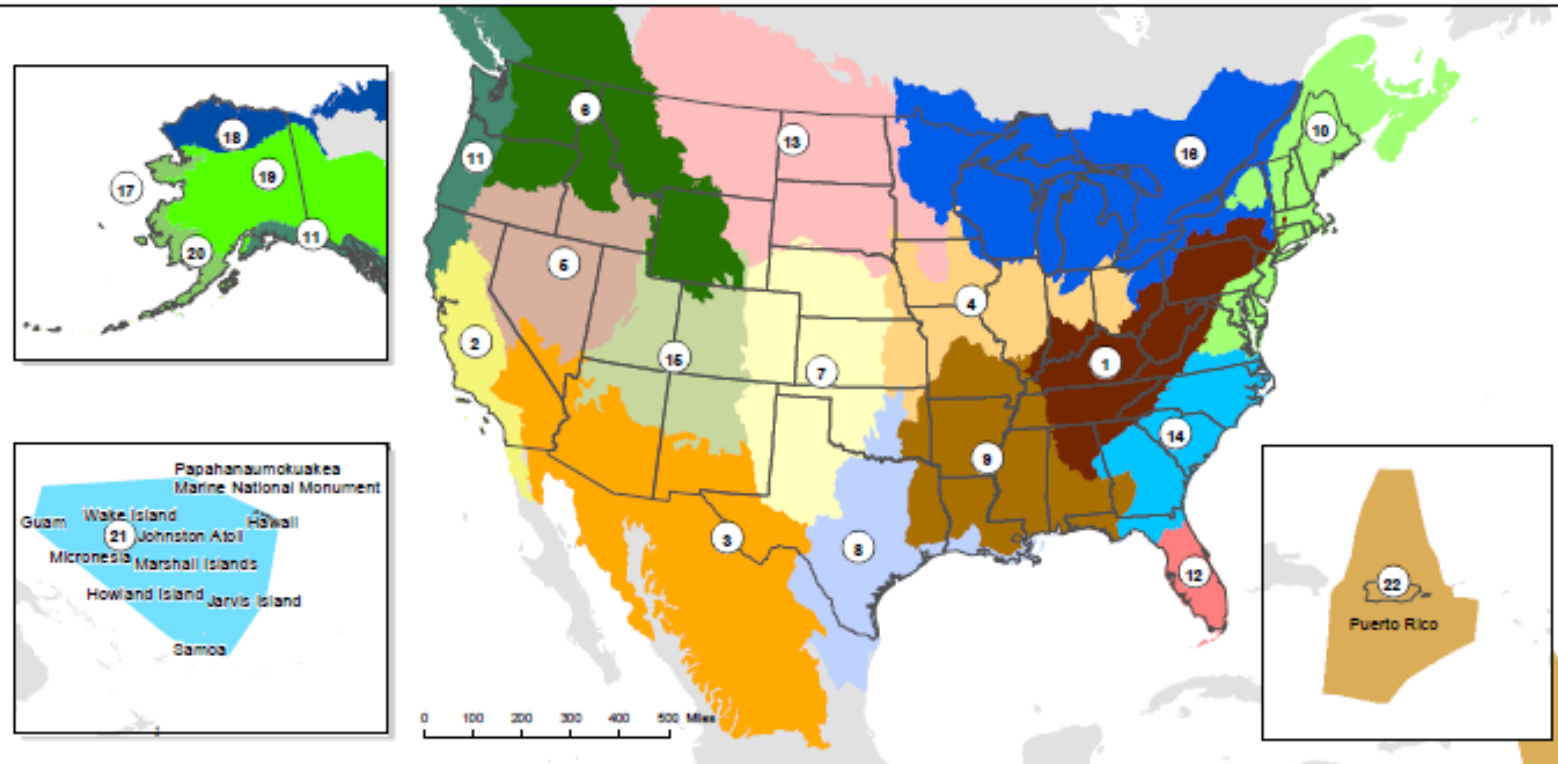
(c) Landscape Conservation Cooperatives. Given the broad impacts of climate change, management responses to such impacts must be coordinated on a landscape-level basis. For example, wildlife migration and related needs for new wildlife corridors, the spread of invasive species and wildfire risks, typically will extend beyond the borders of National Wildlife Refuges, BLM lands, or National Parks. Additionally, some bureau responsibilities (e.g., Fish and Wildlife Service migratory bird and threatened and endangered species responsibilities) extend nationally and globally. Because of the unprecedented scope of affected landscapes, Interior bureaus and agencies must work together, and with other federal, state, tribal and local governments, and private landowner partners, to develop landscape-level strategies for understanding and responding to climate change impacts. Interior bureaus and agencies, guided by the Climate Response Council, will work to stimulate the development of a network of collaborative “Landscape Conservation Cooperatives.” These cooperatives, which already have been formed in some regions, will work interactively with the relevant DOI Regional Climate Change Response Center(s) and help coordinate adaptation efforts in the region.

and cultural heritage and tribal lands and resources from the dramatic effects of climate change that are already occurring – from the Arctic to the Everglades. The realities of climate change require us to change how we manage the land, water, fish and wildlife, and cultural heritage and tribal lands and resources we oversee. For example:

- New water management imperatives associated with climate change may require restoration of natural systems and construction of new infrastructure to reduce new flood risks or to capture early run-off.
  - Strategies to address sea level rise may require acquisition of upland habitat and creation of wetlands and other natural filters and barriers to protect against sea level rise and
  - Shifting wildlife and habitat populations may require investments in new wildlife corridors.
- and more severe droughts will require innovation and more effective ways of managing the Department's resources.

# A national and international seamless network....

## Landscape Conservation Cooperatives



### Landscape Conservation Cooperatives

- |   |                                   |                                     |                                  |
|---|-----------------------------------|-------------------------------------|----------------------------------|
| 1. Appalachian                              | 7. Great Plains                   | 13. Plains and Prairie Potholes     | 19. Northwestern Interior Forest |
| 2. California                               | 8. Gulf Coast Prairie             | 14. South Atlantic                  | 20. Western Alaska               |
| 3. Desert                                   | 9. Gulf Coastal Plains and Ozarks | 15. Southern Rockies                | 21. Pacific Islands              |
| 4. Eastern Tallgrass Prairie and Big Rivers | 10. North Atlantic                | 16. Upper Midwest and Great Lakes   | 22. Caribbean                    |
| 5. Great Basin                              | 11. North Pacific                 | 17. Aleutian and Bering Sea Islands | Unclassified                     |
| 6. Great Northern                           | 12. Peninsular Florida            | 18. Arctic                          |                                  |

Albers Equal Area Conic NAD83  
Produced by FWS, IRTM, Denver, CO  
Map Date: 12/4/2011



# The LCC Network

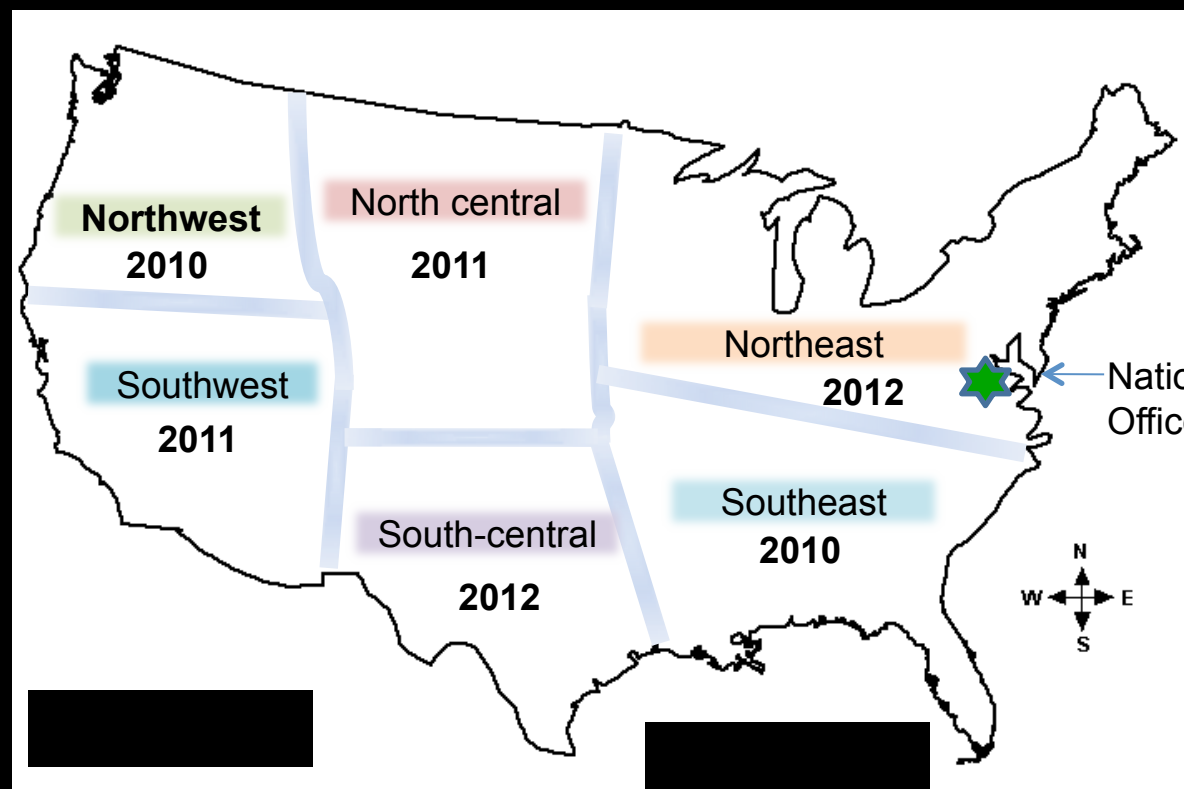
## **Vision**

*To sustain natural and cultural resources valued by society for current and future generations.*

## **Mission**

*To function as a network of cooperatives that provide the forum for developing a shared vision of landscapes that sustains natural and cultural resources, cooperates in its implementation, and collaborates in its refinement.*

# NCCWSC National & DOI Regional CSCs

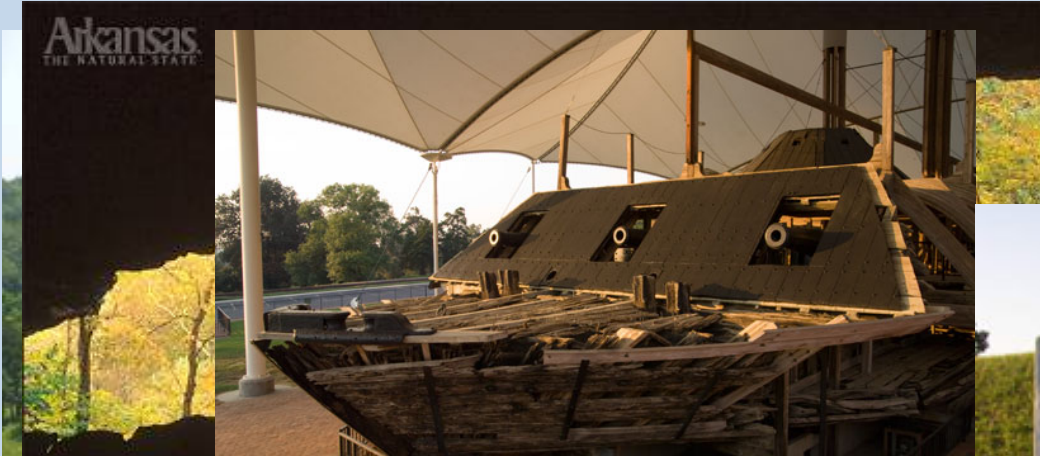


“Fuzzy Boundaries”

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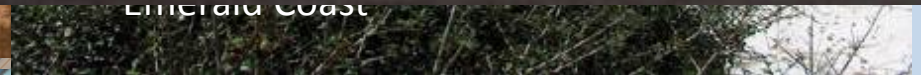
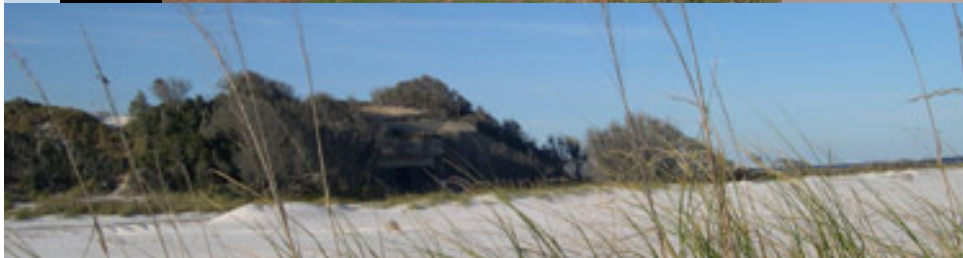
# GCPO – The Geography



## Cultural Resources

Forested Wetlands, Bayous, and

Emerald Coast





# The GCPO LCC and our Mission:

The Gulf Coastal Plains and Ozarks (GCPO) Landscape Conservation Cooperative (GCPO LCC or Cooperative) is a self-directed partnership of federal, state, and private organizations dedicated to the conservation of the natural and cultural resources within the GCPO LCC geography. To achieve its mission, the GCPO LCC will undertake the applied conservation science needed to inform its partners of Strategic Habitat Conservation priorities for the GCPO LCC geography. Further, the GCPO LCC will seek to engage other landscape conservation partnerships within the GCPO geography as full partners in the mutual development and implementation of GCPO LCC priorities.

# The GCPO LCC and our Mission:

- Mission of the GCPO LCC
  - The mission of the Gulf Coastal Plains and Ozarks Landscape Conservation Cooperative is to articulate the shared vision for sustainable natural and cultural resources in the face of a changing climate and other threats, foster a cooperative capacity within the collective conservation community to effectively meet the challenges of achieving that vision, and facilitate the refinement of that vision through targeted evaluation over time

## Steering Committee

Alabama DCNR  
American Bird Conservancy\*  
Arkansas GFC  
Auburn University\*  
The Conservation Fund\*  
Dept of Defense – Army Corps of Engineers  
Ducks Unlimited  
Florida FWCC  
Kentucky DFWR  
Louisiana DWF  
Mississippi DWFP  
Mississippi State University  
Missouri DC  
National Oceanic and Atmospheric Administration  
Natural Resources Conservation Service  
Northern Bobwhite Conservation Initiative  
Oklahoma DWC  
Tennessee WRA  
Texas DPW  
The Nature Conservancy  
US Forest Service  
US Fish & Wildlife Service  
US Geological Survey

• Non-voting members

# Building the Cooperative

The Gulf of the States Planning Council landscape conservation cooperative is overseen and directed by a Steering Committee (Committee). The Committee offers representation of interests in organizations based on their organizational mission of the legislative authority of the cooperative and broad acceptance of responsibility for the cooperative conservation goals of the cooperative. Regardless of the membership level, it is a shared responsibility and commitment of Member Agencies/organizations to the cooperative and its mission, authorities, and budgetary capabilities.

## Steering Committee

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Dept of Defense – Army Corps of Engineers  
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Louisiana DWF  
Mississippi DWFP  
Mississippi State University  
Missouri DC  
National Oceanic and Atmospheric Administration  
Natural Resources Conservation Service  
Northern Bobwhite Conservation Initiative  
Oklahoma DWC  
Tennessee WRA  
Texas DPW  
The Nature Conservancy  
US Forest Service  
US Fish & Wildlife Service  
US Geological Survey

• Non-voting members

# Building the Cooperative

## GCPO LCC Advisory Council

In order to facilitate coordination and integration with existing landscape conservation partnerships (Black Belt Conservation Coalition, etc.) a GCPO LCC Advisory Council is established to provide advice and recommendations to the Steering Committee on conservation issues, strategies, and initiatives of mutual interest to the conservation community of the GCPO LCC. The Council will provide a forum for: 1) formal collaboration on projects of mutual interest; 2) sharing resources and assets to meet mutual goals and objectives; 3) making recommendations on priority projects, strategies, and initiatives for the collective GCPO LCC conservation community.

Black Belt Conservation Coalition

Central Hardwoods Joint Venture

East Gulf Coastal Plains Joint Venture

Gulf Coast Joint Venture

Gulf of Mexico Alliance

Lower Mississippi Valley Joint Venture

Lower Mississippi River Conservation

Committee

Southeast Aquatic Resources

Partnership

Southeast Bat Diversity Network

Southeast Partners in Amphibian and

Reptilian Conservation



# One of the last pieces of the puzzle....

## Adaptation Science Management Team

	Fish	Herps	Birds	Mammals	Aquatic Inverts	Plants	Culture	Water
East Gulf Coastal Plain/ South Atlantic-Gulf, Tennessee	<a href="#"><u>Tim Churchill</u></a> (TWRA)	<a href="#"><u>Jessica Homyack</u></a> (Weyerhaeuser)	<a href="#"><u>Barry Grand</u></a> (USGS- Auburn)	<a href="#"><u>Darren Miller</u></a> (Weyerhaeuser)	<a href="#"><u>Jeff Powell</u></a> (USFWS)	<a href="#"><u>Alex Wyss</u></a> (TNC)	<a href="#"><u>Ken Ppool</u></a> (MDAH)	<a href="#"><u>Scott Gain</u></a> (USGS)
Interior Highlands/Missouri, Ohio, Upper Mississippi	<a href="#"><u>Mike Kruse</u></a> (MDC)	<a href="#"><u>Bill Sutton</u></a> (SEPARC-UTK)	<a href="#"><u>Todd Jones-</u></a> <a href="#"><u>Farrand</u></a> (CHJV)	<a href="#"><u>Shauna</u></a> <a href="#"><u>Marquardt</u></a> (USFWS)	<a href="#"><u>David</u></a> <a href="#"><u>Bowles (NPS)</u></a>	<a href="#"><u>Esther Stroh</u></a> (USGS-CEEC)	VACANT	<a href="#"><u>Dan</u></a> <a href="#"><u>Magoulick -</u></a> (USGS-UA)
Mississippi Alluvial Valley/ Lower Mississippi	<a href="#"><u>Hal Schramm</u></a> (USGS-MSU)	<a href="#"><u>Hardin Waddle</u></a> (USGS-NWRC)	<a href="#"><u>Randy</u></a> <a href="#"><u>Wilson</u></a> (USFWS)	<a href="#"><u>Joe Clark (UTK)</u></a>	<a href="#"><u>Wendell</u></a> <a href="#"><u>Haag (USFS)</u></a>	<a href="#"><u>Sammy King</u></a> (USGS-LSU)	<a href="#"><u>Margo</u></a> <a href="#"><u>Schwadron</u></a> (NPS)	<a href="#"><u>Ed Lambert</u></a> (USACE)
West Gulf Coastal Plain/ Arkansas-Red-White, TX- Gulf	<a href="#"><u>Lee Holt</u></a> (AGFC)	<a href="#"><u>Craig Rudolph</u></a> (USFS)	<a href="#"><u>Jonathan</u></a> <a href="#"><u>Thompson</u></a> (LMVJV)	<a href="#"><u>Chris Comer</u></a> (SFA)	<a href="#"><u>Tony Brady</u></a> (USFWS)	<a href="#"><u>Jason Singhurst</u></a> (TPWD)	VACANT	VACANT
Gulf Coast/TX-Gulf	<a href="#"><u>Glenn</u></a> <a href="#"><u>Constant</u></a> (USFWS)	<a href="#"><u>JJ Apodaca</u></a> (SEPARC-FSU)	<a href="#"><u>Mark</u></a> <a href="#"><u>Woodrey</u></a> (MSU)	<a href="#"><u>Jeff Duguay</u></a> (LDWF)	<a href="#"><u>Meg</u></a> <a href="#"><u>Goecker</u></a> (NOAA)	<a href="#"><u>Julie Whitbeck</u></a> (NPS)	<a href="#"><u>Tina Shumate</u></a> (MDMR)	<a href="#"><u>Mike Shelton</u></a> (ADCNR)

Functional  
Researcher  
Manager  
About 50-50

Organizational  
Federal  
State  
NGO/Private  
Partnership

## GCPO LCC Conservation Science Staff

### Conservation Science Staff

**Greg Wathen, Coordinator (TWRA)**

**Dr. John Tirpak, Science Coordinator (USFWS)**

**Dr. Michael Osland, Research Ecologist (USGS)**

**Karen “Gregg” Elliott, Communications Specialist**

**Laurie Rounds, NOAA-LCC Liaison**

**Taylor Hannah, SCEP Student, Univ. of TN at Martin**

**Alexis Londo, GIS Coordinator, Mississippi State University**

**Aquatics GIS Position, Baton Rouge, LA (FWS)**

**Advanced Applications Specialist, Univ. of Louisiana-Lafayette**



# Functional Roles of Landscape Conservation Cooperatives

- Offer partners a landscape perspective for their conservation activities
- Develop explicit linkages across existing conservation partnerships that span multiple taxa and habitats
- Help incorporate future change into conservation planning (e.g., urbanization, sea-level rise)
- Pull these pieces together to help conservation partners define and design sustainable landscapes
  - Conservation Adaptation Strategy



**Southeast Conservation  
Adaptation Strategy: A SEAFWA Briefing**



**Collaboratively Defining a Future  
Conservation Landscape in the  
Southeastern US**



Like marshes, mangroves protect coastlines/  
[Kristine Paulus/FlickrCC](#)

Sections of the northern Gulf coastline within the  
GCPO may become the last holdouts of salt marsh  
in the Gulf of Mexico/GCPO LCC

High densities of shrimp and blue crabs use  
northern Gulf marsh surfaces/[Marcie Casas/FlickrCC](#)

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# Strategic Habitat Conservation:

Selecting Species for Designing Functional Landscapes

August 14, 2012

GCPO LCC Steering Committee Webex Meeting  
Presentation on SHC and Surrogate Species  
By Mark Musaus



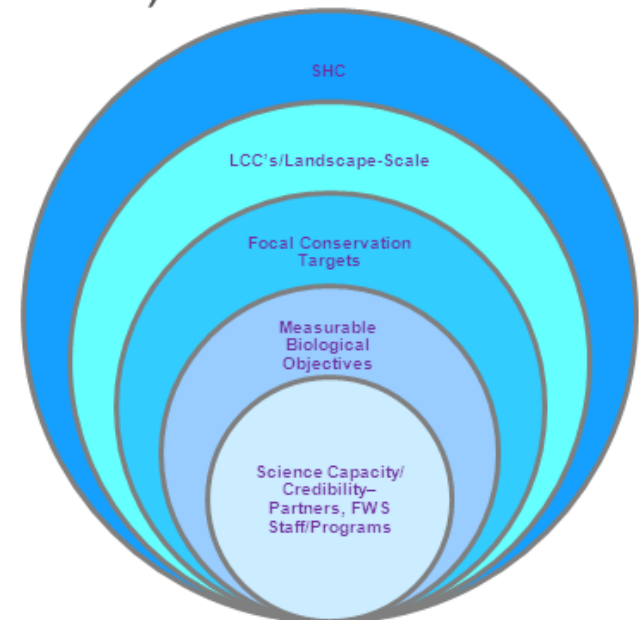


# Selecting Species for Designing Functional Landscapes

The technical guidance:

- Title emphasizes the purpose of the document: designing functional landscapes that will support self-sustaining populations of plants, fish, and wildlife.
- Describes an approach, not prescription, for selecting a subset of focal conservation targets that can represent other species or aspects of the environment (“surrogate species”).
- Uses LCC units as geographic scale.
- Discusses importance of setting *measurable* biological objectives for conservation targets.

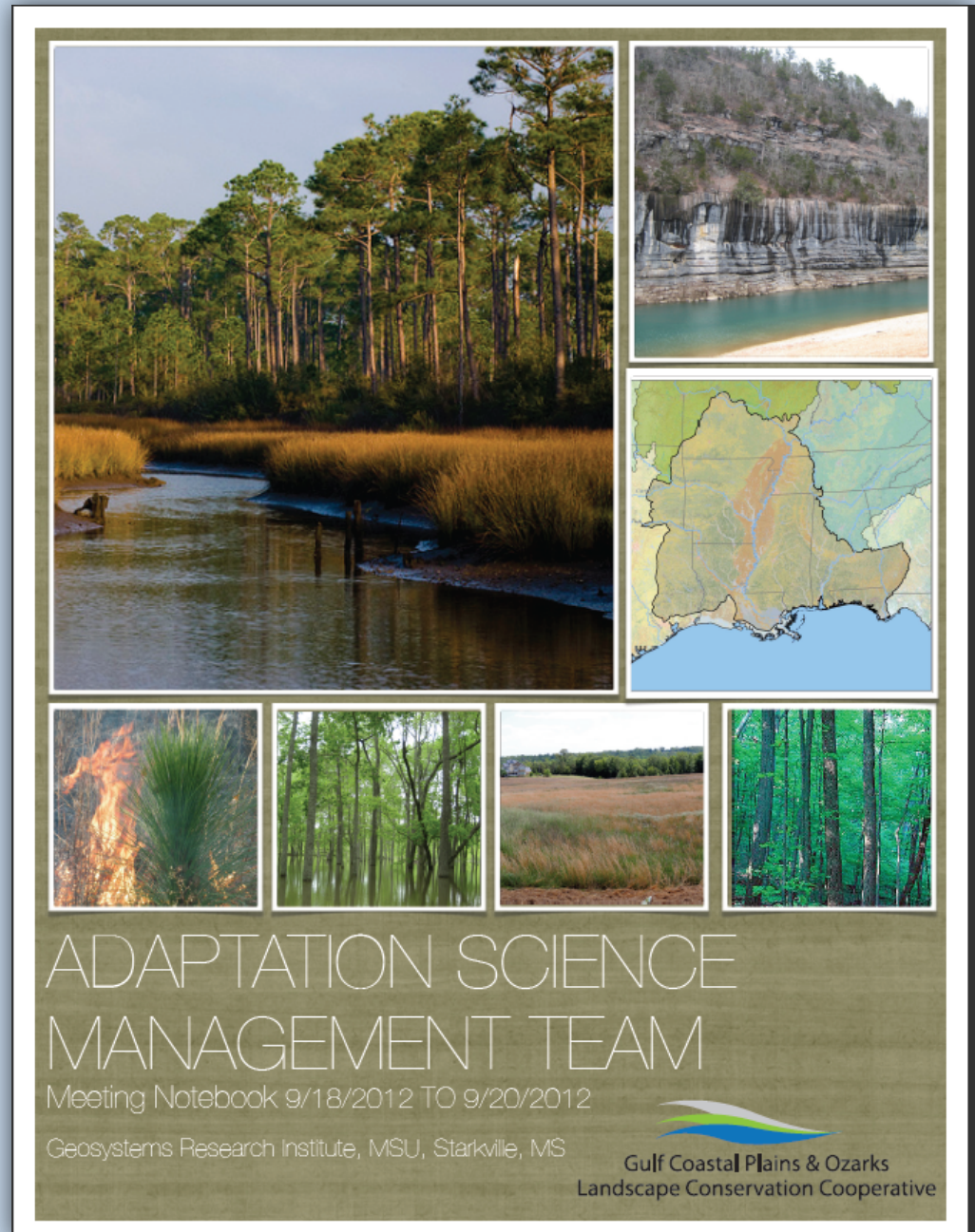
***Key = Increased science credibility/capacity and adaptive/iterative approach.***





# Adaptation Science- Management Team

- First meeting held Sept 18-20, 2012, in Starkville, MS.
- Workshop was geared towards developing a Conservation Framework for the GCPO LCC, with SHC as a foundational principle.
- ASMT members initiated conceptual conservation models for the 5 major subgeographies of the GCPO LCC.
- ASMT members supported the use of surrogate species to guide refinement of ecological endpoints, and offered to assist FWS in leading the effort to identify appropriate surrogate species.




# Gulf Coastal Plains and Ozarks LCC

Conserving Fish and Wildlife Through Science, Technology, and Partnerships

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**Greg Wathen**

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## Strategic Habitat Conservation, Surrogate Species, and the GCPO LCC

Posted by Greg Wathen on October 4, 2012 at 10:00am

 [View Blog](#)

There has been a lot of talk about surrogate species lately, or at least there has been a lot of talk within the U.S. Fish & Wildlife Service. If you haven't heard about surrogate species, or if you are not familiar with the terminology, here's a synopsis: On July 23, 2012, USFWS Director Dan Ashe released an announcement to Service employees, directing the Fish & Wildlife Service to embark on a fundamentally new path of conservation in the 21<sup>st</sup> century. The basic announcement was that for the Service to be successful and true to its mission in the 21<sup>st</sup> century, it would require a new way of working and thinking about their conservation work. In short, Dan Ashe wanted to increase the Service's commitment to Strategic Habitat Conservation as a way of working, to direct their work towards landscape level priorities, and to better prepare itself for the accelerated changes and landscape stresses of the 21<sup>st</sup> century. The approach that the Service is proposing to define and design landscapes capable of sustaining fish and wildlife is called "surrogate species".



This week, in Memphis, TN (at the Ducks Unlimited Headquarters), and the last week in October in Lafayette, LA, the USFWS will be hosting workshops on its [Draft Technical Guidance on Selecting Species for Design of Landscape Scale Conservation](#). The purpose of the

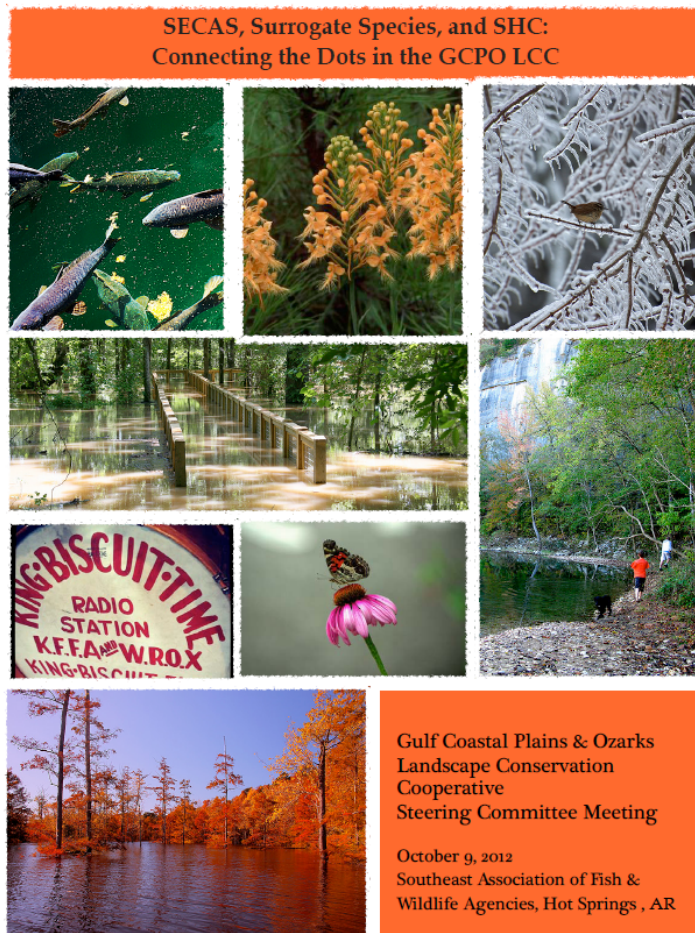
Main Room

Men



# GCPO LCC Steering Committee Meeting

## SEAFWA – Hot Springs, AR



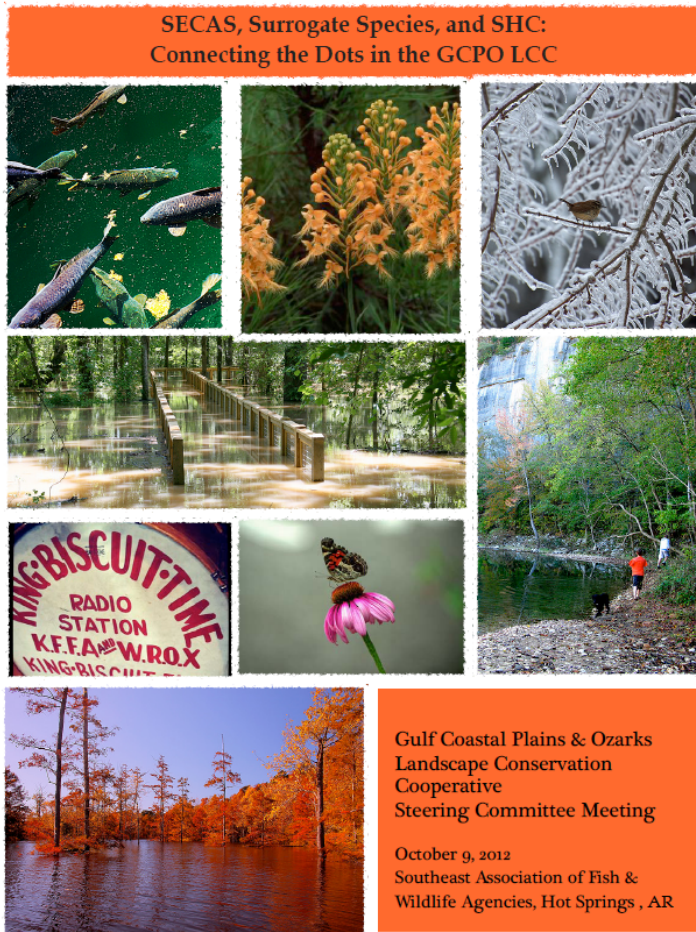
- The GCPO LCC Steering Cmte had a lengthy discussion about the potential role of the LCC in helping to select surrogate species to meet the LCC's goal of defining, designing, and delivering sustainable landscapes.
- The surrogate species approach is well aligned with the GCPO LCC's conservation planning framework, as recommended by the ASMT, and with the larger goal of developing a Southeast Conservation Adaptation Strategy.



	GCPO LCC Conservation Framework	SHC/ Surrogate Species	SECAS
Founded on SHC	<b>X</b>	<b>X</b>	<b>?x</b>
Seeks to define, design functional landscapes	<b>X</b>	<b>X</b>	<b>X</b>
Incorporates future change into process	<b>X</b>	<b>?</b>	<b>X</b>
Fits within the GCPO LCC's mission	<b>X</b>	<b>X</b>	<b>X</b>
Endorsed by the GCPO LCC	<b>X</b>	<b>?x</b>	<b>X</b>

# GCPO LCC Steering Committee Meeting

## SEAFWA – Hot Springs, AR



Decision: The GCPO LCC Steering Committee tabled the issue of aligning the ASMT approach for identifying species endpoints to guide conservation design with the USFWS Surrogate Species effort. Steering Committee members indicated additional time was needed to get more information about the implications of alignment. A number of Steering Committee members indicated that they would be attending the USFWS Workshop in Lafayette.



## **Southeast Conservation Adaptation Strategy: A SEAFWA Briefing**



**Collaboratively Defining a Future  
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# Gulf Coastal Plains and Ozarks LCC

Conserving Fish and Wildlife Through Science, Technology, and Partnerships

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## Latest Activity

Edit



Gregg Elliott posted blog posts

**Mississippi River Corridor - Tennessee, Inc - the Little Organization that Could**

**New Free Tools for Stream Ecosystem Modeling Available**

2 minutes ago



Gregg Elliott posted an event

**Gulf Coast Joint Venture fall 2012 Board Meeting at Southeast Louisiana Refuges Complex Headquarters**

October 30, 2012 to October 31, 2012

21 minutes ago

0



Blair Tirpak updated their profile

15 hours ago



Gregg Elliott posted an event



**East Gulf Coastal Plain**

## Photos

Edit



+ Add Photos

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## What's been happening lately in the GCPOLCC?

Edit

The fall meeting of the GCPOLCC's Steering Committee will be held in conjunction with SEAFWA in Hot Springs, AR on Oct. 9th. Background materials are available.

The first meeting of the GCPOLCC's Adaptation Science Management Team was held Sep 18-20 at MSU. Background materials are available, and you can download a [Rapid Review](#) of the results.

The GCPOLCC has a new factsheet available! In addition, our projects page has 6 factsheets about some of our top priority projects.

## Greg Wathen

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## Awaiting Approval

1 New Member

Check out the latest News! Edit

## The GCPOL Monitor:

July/August 2012

June 2012

May 2012

Mar/April 2012

Feb 2012

Jan 2012

Dec 2011

Oct/Nov 2011

Sep 2011

## Key Documents:

Factsheet (July 2012)

2011 Annual Report

LCC FAQs (2012)

[www.gcpolcc.org](http://www.gcpolcc.org)